



CLINICAL GUIDELINE

Resuscitation: Emergency Transfusion of O-Negative Blood in Theatre

Scope (Staff):	Nursing and Medical Staff
Scope (Area):	NICU KEMH

This document should be read in conjunction with this [DISCLAIMER](#)

This document must be read in conjunction with Transfusion Medicine: [Critical Bleeding Protocol](#)

Indication

- Massive blood loss with associated shock (weak pulses, bradycardia) not responding to volume replacement with normal saline.

Access to Uncrossmatched O Rh D-Negative Blood

If a newborn requires urgent transfusion, it is preferable to obtain O Negative blood from Blood Bank, as they check the mother's antibody status and immediately issue the uncrossmatched blood through the computer system that has in-built checks. They will immediately issue uncrossmatched blood with a proper label. However, in a life threatening emergency situation, where blood is needed immediately at delivery, a stock of one (1) O Negative fresh (≤ 7 days old) CMV Negative red cell adult packs are stored in the monitored Theatre Recovery blood fridge for neonatal resuscitation.

Process for Resuscitation Team

- Neonatal staff can be preoccupied with the resuscitation therefore the attending midwife in theatre will be nominated the nominated person to collect the O Rh D Negative blood from the theatre blood fridge.
- At the earliest possible opportunity, the nominated person must:
 - Telephone the Blood Bank (Ext 82748) when blood is removed from the blood fridge and provide the full maternal name, UMRN, location, clinical indication, and name of the requesting clinician.
 - Complete the Uncrossmatched Emergency O Negative label attached to the pack and send to Blood Bank. [See Appendix 1](#)
- While on the phone, the Blood Bank scientist will:
 - Check the maternal history and antibody status
 - Where possible, offer an alternative if the O Negative blood is likely to be incompatible with known maternal antibodies
 - Request an urgent neonatal crossmatch sample to be collected and sent to Blood Bank. Ideally this should be pre-transfusion where possible. The

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request should be clearly notated to reflect whether the sample is PRE or POST transfusion.

- Advise if additional maternal or cord blood samples are required.
- Provide additional blood products as required.
- Notify Blood Bank immediately if the blood pack is:
 - Removed from the blood fridge
 - Not set up for infusion within 30 minutes
 - Returned to the blood fridge unused
 - Or if there are any problems with the fridge, blood packs or the process
- Blood that has out of the blood fridge for > 30 minutes and not transfused is no longer suitable for clinical use because of the risk of bacterial proliferation and MUST be returned to Blood Bank for documented disposal. All blood wastage is reviewed by the KEMH Transfusion Committee.

Essential Documentation

Requesting Neonatologist/Senior Registrar are to ensure:


- The Theatre Transfusion Register is completed with date and time of blood removal and/or return to Recovery blood fridge.
- If blood is transfused, completing the 'Uncrossmatched Emergency O Negative' label attached to each pack.
- Returning the completed Theatre Transfusion Register form and labels to Blood Bank as soon as possible.
- NOTE: It is essential that Blood Bank is notified of the outcome of any blood packs that are not used within the 30 minute time frame.

Downtime Procedure

- Refer to Appendix 1 in KEMH [Critical Bleeding Protocol](#)
- The emergency blood will be taken down and stored in blood bank by their staff.
- Anticipate the potential need for blood (eg in cases of large APH) and designate someone in the resuscitation team to order it.
- Theatre will call Blood Bank if emergency O Rh D-Neg blood is required for neonatal resuscitation. Blood Bank will only issue the designated adult units. Minipacks will NOT be offered.
- A call to blood bank (direct extension: 82748) needs to be made to request this unit. While any staff member can call for the blood, the neonatal staff are usually preoccupied with the resuscitation. The attending midwife can be asked to call blood bank in such circumstances.
- The theatre PCA (if not in theatre) is then paged over the theatre intercom to collect the blood from blood bank.

Related CAHS internal policies, procedures and guidelines	
WNHS	
Transfusion Medicine:	Critical Bleeding Protocol
Transfusion Medicine:	Blood Products: Neonates

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Appendix 1

NEONATAL USE ONLY		
EMERGENCY O NEG BLOOD		
O NEG CMV Neg <7 days old	DONOR #	
<p>1) REMOVE BLOOD and NOTIFY BLOOD BANK Ext 82748</p> <p>2) Complete this form and send to Blood Bank</p>		
REMOVED FROM FRIDGE	DATE	TIME
CLINICIAN	NAME	SIGN
BABY(if known)	NAME	UMRN
MOTHER	NAME	UMRN